

JUN 11 2001

#3

FORM PTO-1449 (Modified)		Attorney Docket No.: 14643-009031US	Application No.: 09/724,965
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION		Applicant: Nils Lonberg et al.	
RE-SEARCH STATEMENT (Use several sheets if necessary)		Filing Date: November 28, 2000	Group: 1632

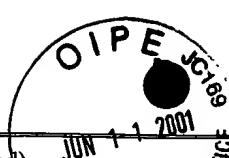
Reference Designation		U.S. PATENT DOCUMENTS			Page 1	
Examiner Initial	Document No.	Date	Name	Class	Sub-class	Filing Date (If Appropriate)
NP AA	5,175,384	12/29/92	Krimpenfort et al.	800	11	
NP AB	5,204,244	04/20/93	Fell et al.	435	69.6	
NP AC	5,434,340	07/18/95	Krimpenfort et al.	800	11	
NP AD	5,698,196	12/16/97	Matsushima	424	139,1	
NP AE	5,702,946	12/30/97	Doerchuk	435	320,1	

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub-class	Translation (Yes/No)
NP AF	EP0315062	05/10/89	EP			
NP AG	WO9004036	04/19/90	PCT			
NP AH	WO9012878	11/01/90	PCT			
NP AI	WO9100906	01/24/91	PCT			
NP AJ	WO9110741	07/25/91	PCT			
NP AK	WO9203918	03/19/92	PCT			
NP AL	WO9602576	02/01/96	PCT			abstract only

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AM	Alt et al., "Immunoglobulin genes in transgenic mice," TIG August 1985
AN	Berman et. al. "Content and organization of the human Ig V _H locus: definition of three new V _H families and linkage to the g CH locus," The EMBO J. 7:727-738 (1988)
AO	Berton et. al. "Synthesis of germ-line -γ1 immunoglobulin heavy-chain transcripts in resting B cells: Induction by interleukin 4 and inhibition by interferon γ, Proc. Natl. Acad. Sci. (U.S.A) 86:2829-2833 (1989)
AP	Bollag et al. "Homologous recombination in mammalian cells," Annu. Rev. Genet. 23:199-225 (1989)
AQ	Bruggemann et al. "A repertoire of monoclonal antibodies with human heavy chains from transgenic mice," Proc. Natl. Acad. Sci. USA 86:6709-6713 (1989)
AR	Bruggemann et al., "Human antibody production in transgenic mice: expression from 100 kb of the human IgH locus," Eur. J. Immunol. 21:1323-1326 (1991)
AS	Bucchini et al. "Rearrangement of a chicken immunoglobulin gene occurs in the lymphoid lineage of transgenic mice," Nature 326:409-411 (1987)
AT	Buttin "Exogenous Ig gene rearrangement in transgenic mice: a new strategy for human monoclonal antibody production" TIG Vol 3, no. 8 (1987)
AU	Capecci "Altering the genome by homologous recombination," Science 244:1288-1292 (1989)
AV	Capecci, "The new mouse genetics: Altering the genome by gene targeting," TIG 5:70-76 (1989)
AW	Chen et al. "Characterization of two immunoglobulin V _H genes that are homologous to human rheumatoid factors" Arthritis Rheum. 32:72-76 (1989)
AX	Coffman et al. "A mouse T cell product that preferentially enhances IgA production," J. Immunol. 139:3685-3690 (1987)
AY	Coffman et al. "T cell activity that enhances polyclonal IgE production and its inhibition by interferon-γ," J. Immunol. 136:949-954 (1986)
AZ	Doetschman et al. "Targeted correction of a mutant HPRT gene in mouse embryonic stem cells," Nature 330:576-578 (1987)



FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION STATEMENT (Use several sheets if necessary)		Attorney Docket No.: 14643-009031US Applicant: Nils Lonberg et al. Filing Date: November 28, 2000	Application No.: 09/724,965 Group: 1632
BA	Durdik et al. "Isotype switching by a microinjected μ immunoglobulin heavy chain gene in transgenic mice," Proc. Natl. Acad. Sci. USA 86:2346-2350 (1989)		
BB	Esser and Radbruch "Rapid induction of transcription of unarranged S71 switch regions in activated murine B cells by interleukin 4," EMBO J. 8:483-488 (1989)		
BC	Ferrier et al. "Separate elements control DJ and VDJ rearrangement in a transgenic recombination substrate," The EMBO J. 9:117-125 (1990)		
BD	Fishwild et al. "High avidity human IgG κ monoclonal antibodies from a novel strain of minilocus transgenic mice" Nature Biotechnology 14:845 (1996)		
BE	Forni "Extensive splenic B cell activation in IgM-transgenic mice," Eur. J. Immunol. 20:983-989 (1990)		
BF	Gerstein et al. "Isotype switching of an immunoglobulin heavy chain transgene occurs by DNA recombination between different chromosomes," Cell 63:537-548 (1990)		
BG	Goodhardt et al. "Rearrangement and expression of rabbit immunoglobulin κ light chain gene in transgenic mice," Proc. Natl. Acad. Sci. (U.S.A.) 84:4229-4233 (1987)		
BH	Gordon "Transgenic mice in immunology," The Mount Sinai Journal Of Medicine 53:223-231 (1986)		
BI	Green et al. "Antigen-specific human monoclonal antibodies from mice engineered with human Ig heavy and light chain YACs," Nature Genetics 7:13-21 (1994)		
BJ	Hagman et al. "Inhibition of immunoglobulin gene rearrangement by the expression of a $\lambda 2$ transgene," J. Exp. Med. 169:1911-1929 (1989)		
BK	Hofker et al. "Complete physical map of the human immunoglobulin heavy chain constant region gene complex," Proc. Natl. Acad. Sci. USA 86:5567-5571 (1989)		
BL	Humphries et al. "A new human immunoglobulin V H family preferentially rearranged in immature B-cell tumours," Nature 331:446-449 (1988)		
BM	Ichihara et al. "Organization of human immunoglobulin heavy chain diversity gene loci," Embo J. 7:4141-4150 (1988)		
BN	Iglesias et al. "Expression of immunoglobulin delta chain causes allelic exclusion in transgenic mice," Nature 330:482-484 (1987)		
BO	Jaenisch "Transgenic Animals," Science 240:1468-1474 (1988)		
BP	Jakobovits et al. "Analysis of homozygous mutant chimeric mice: Deletion of the immunoglobulin heavy-chain joining region blocks B-cell development and antibody production," Proc. Natl. Acad. Sci. USA 90:2551-2555 (1993)		
BQ	James and Bell, "Human monoclonal antibody production current status and future prospects," J. of Immunol. Methods 100:5-40 (1987)		
BR	Jasin and Berg, "Homologous integration in mammalian cells without target gene selection," Genes & Development 2:1353-1363 (1988)		
BS	Ji et al. "Flow cytometry analysis of the neutralization effect of anti-IL8 monoclonal antibodies on IL-8 activated human granulocytes," Journal of Experimental Biology, Volume 28, No. 3 (1995)		
BT	Jonker et al. " <i>In vivo</i> treatment with a monoclonal chimeric anti-CD4 antibody results in prolonged depletion of circulating CD4+ cells in chimpanzees," Clin. Exp. Immunol. 93:301-307 (1993)		
BU	Jung et al. "Shutdown of class switching recombination by deletion of a switch region control element," Science 259:984-987 (1993)		
BV	Kenny et al. "Alteration of the B cell surface phenotype, immune response to phosphocholine and the b cell repertoire in M167 α plus κ transgenic mice," J. of Immunol. 142:4466-4474 (1989)		
BW	Kitamura et al. "A B cell-deficient mouse by targeted disruption of the membrane exon of the immunoglobulin μ chain gene," Nature 350:423-426 (1991)		
BX	Knox et al. "Observations On The Effect Of Chimeric Anti-CD4 Monoclonal Antibody In Patients With Mycosis Fungoides," Blood 77:20-30 (1991)		
BY	Koller and Smithies, "Inactivating the β_2 -microglobulin locus in mouse embryonic stem cells by homologous recombination," Proc. Natl. Acad. Sci. USA 86:8932-8935 (1989)		
BZ	Kurdowska et al. "An anti-interleukin 8 monoclonal antibody that interferes with the binding of interleukin 8 to cellular receptors and the activation of human blood neutrophils" Hybridoma Volume 14, No. 3, pages 225-233 (1995)		
CA	Lin et al. "Recombination in mouse L cells between DNA introduced into cells and homologous chromosomal sequences," Proc. Natl. Acad. Sci. USA 82:1391-1395 (1985)		

JUN 11 2001

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Attorney Docket No.: 14643-009031US Applicant: Nils Lonberg et al. Filing Date: November 28, 2000	Application No.: 09/724,965 Group: 1632
CB	Linton et al. "Primary antibody-forming cells secondary B-cells are generated from separate precursor cell subpopulations," <i>Cell</i> 59:1049-1059 (1989)		
CC	Lo et al., "Expression of mouse IgA by transgenic mice, pigs and sheep," <i>Eur. J. Immunol.</i> 21:1001-1006 (1991)		
CD	Lonberg et al. "Antigen-specific human antibodies from mice comprising four distinct genetic modifications," <i>Nature</i> 368:856-859 (1994)		
CE	Lorenz et al. "Physical map of the human immunoglobulin k locus and its implications for the mechanisms of V _K -J _K rearrangement," <i>Nucl. Acids Res.</i> 15:9667-9676 (1987)		
CF	Lutzker and Alt "Structure and expression of germ line immunoglobulin γ2b transcripts," <i>Mol. Cell Biol.</i> 8:1849-1852 (1988)		
CG	Mansour et al. "Disruption of the proto-oncogene int-2 in mouse embryo-derived stem cells: a general strategy for targeting mutations to non-selectable genes," <i>Nature</i> 336:348-352 (1988)		
CH	Miller et al. "Structural alterations in J regions of mouse immunoglobulin γ genes are associated with differential gene expression," <i>Nature</i> 295:428-430 (1982)		
CI	Mills et al. "DNase I hypersensitive sites in the chromatin of human A immunoglobulin heavy-chain genes," <i>Nature</i> 306:809-812 (1983)		
CJ	Mills et. al. "Sequences of human immunoglobulin switch regions: implications for recombination and transcription," <i>Nucl. Acids. Res.</i> 18:7305-7316 (1991)		
CK	Morrison, "Success in specification," <i>Nature</i> 368:812-813 (1994)		
CL	Mowatt et. al., "DNA sequence of the murine 71 switch segment reveals novel structural elements," <i>J. Immunol.</i> 136:2674-2683 (1986)		
CM	Muller et al., "Membrane-bound igm obstructs b cell development in transgenic mice," <i>Eur. J. Immunol.</i> 19:923-928 (1989)		
CN	Murray & Szostak "Construction of artificial chromosomes in yeast," <i>Nature</i> 305:189-193 (1983)		
CO	Neuberger "Generating high-avidity human Mabs in mice," <i>Nature Biotechnology</i> 14:826 (1996)		
CP	Neuberger et al. "Isotype exclusion and transgene downregulation in immunoglobulin-λ transgenic mice," <i>Nature</i> 338:350-352 (1989)		
CQ	Newman et al. "'Primatization' of recombinant antibodies for immunotherapy of human disease: a macaque/human chimeric antibody against human c4" <i>Biotechnology</i> . 10:1455-1460 (1992)		
CR	Nikaido et al. "Nucleotide sequences of switch regions of immunoglobulin C and C genes and their comparison," <i>J. Biol. Chem.</i> 257:7322-7329 (1982)		
CS	Nikaido et al. "Switch region of immunoglobulin Cμ gene is composed of simple tandem repetitive sequences," <i>Nature</i> 292:845-848 (1981)		
CT	Nussenzweig et al. "Allelic exclusion in transgenic mice carrying mutant human IgM genes" <i>J. Exp. Med.</i> 167:1969 (1988)		
CU	Nussenzweig et al. "A human immunoglobulin gene reduces the incidence of lymphomas in c-Myc-bearing transgenic mice," <i>Nature</i> 336:446-450 (1988)		
CV	Oettinger et al. "RAG-1 and RAG-2, adjacent genes that synergistically activate V(D), J recombination," <i>Science</i> 248:1517-1523 (1990)		
CW	Petters "Transgenic mice in immunological research," <i>Vet. Immunol. Immunopath.</i> 17:267-278 (1987)		
CX	Pettersson et al. "A second B cell-specific enhancer 3' of the immunoglobulin heavy-chain locus," <i>Nature</i> 344:165-168 (1990)		
CY	Powelson et al. "CDR-Grafted OKT4A Monoclonal Antibody In Cynomolgus Renal Allograft Recipients," <i>Transplantation</i> 57:788:793 (1994)		
CZ	Rabbits et. al. "Human immunoglobulin heavy chain genes: evolutionary comparisons of Cμ, Cδ and Cy genes and associated switch sequences," <i>Nucl. Acids Res.</i> 9:4509-4524 (1981)		
DA	Rath et al. "B Cell abnormalities induced by a μ ig transgene extend to L chain isotype usage," <i>J. Of Immunol.</i> 146:2841 (1991)		
DB	Rath et al. "Quantitative analysis of idiotypic mimicry and allelic exclusion in mice with a μ Ig transgene," <i>J. of Immunol.</i> 143:2074-2080 (1989)		
DC	Ravetch et al. "Evolutionary approach to the question of immunoglobulin heavy chain switching: Evidence from cloned human and mouse genes," <i>Proc. Natl. Acad. Sci. (U.S.A.)</i> 77:6734-6738 (1980)		

JUN 11

PATENT & TRADEMARK OFFICE
U.S. DEPARTMENT OF COMMERCE

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLIC STATEMENTS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Attorney Docket No.: 14643-009031US	Application No.: 09/724,965
		Applicant: Nils Lonberg et al.	
		Filing Date: November 28, 2000	Group: 1632
DD	Reid et al. "A single DNA response element can confer inducibility by both α and γ -interferons," Proc. Natl. Acad. Sci. (U.S.A.) 86:840-844 (1989)		
DE	Ritchie et al. "Allelic exclusion and control of endogenous immunoglobulin gene rearrangement in κ transgenic mice," Nature 312:517-520 (1984)		
DF	Rothman et al. "Structure and expression of germline immunoglobulin γ 3 heavy chain gene transcripts: implications for mitogen and lymphokine directed class-switching," Int'l. Immunol. 2:621-627 (1990)		
DG	Rusconi et al. "Transmission and expression of a specific pair of rearranged immunoglobulin μ and κ genes in a transgenic mouse line," Nature 314:330-334 (1985)		
DH	Sato et al. "Physical linkage of a variable region segment and the joining region segment of the human immunoglobulin heavy chain locus," Biochem. Biophys. Res. Comm. 154:264-271 (1988)		
DI	Scangos and Bieberich, "Gene transfer into mice," Advances in Genetics 24: 285-322 (1987)		
DJ	Sekido et al. "Prevention of lung reperfusion injury in rabbits by a monoclonal antibody against interleukin-8" Nature, Volume 365, pages 654-657 (1993)		
DK	Sedivy and Sharp, "Positive genetic selection for gene disruption in mammalian cells by homologous recombination," Proc. Natl. Acad. Sci. USA 86:227-231 (1989)		
DL	Shimizu et al. "Immunoglobulin double-isotype expression by trans-mRNA in a human immunoglobulin transgenic mouse," Proc. Natl. Acad. Sci. USA 86:8020-8023 (1989)		
DM	Shimizu et al. "Trans-splicing as a possible molecular mechanism for the multiple isotype expression of the immunoglobulin gene," J. Exp. Med. 173:1385-1393 (1991)		
DN	Sideras et al. "Production of sterile transcripts of Cy genes in an IgM-producing human neoplastic B cell line that switches to IgG-producing cells," Int'l. Immunol. 1: 631-642 (1989)		
DO	Siebenlist et al. "Human immunoglobulin D segments encoded in tandem multigenic families," Nature 294:631-635 (1981)		
DP	Smithies et al. "Insertion of DNA sequences into the human chromosomal β -globulin locus by homologous recombination," Nature 317:230-234 (1985)		
DQ	Snapper et al., "Interferon- γ and B cell stimulatory factor-1 reciprocally regulate Ig isotype production," Science 236:944-947 (1987)		
DR	Song et al. "Accurate modification of a chromosomal plasmid by homologous recombination in human cells," Proc. Natl. Acad. Sci. USA 84:6820-6824 (1987)		
DS	Soriano et al. "Targeted disruption of the c-src protooncogene leads to osteopetrosis in mice," Cell 64:693-702 (1991)		
DT	Stavnezer et al. "Immunoglobulin heavy-chain switching may be directed by prior induction of transcripts from constant region genes," Proc. Natl. Acad. Sci. (U.S.A.) 85:7704-7708 (1988)		
DU	Stites et al. <u>Basic & Clinical Immunology</u> , page 50 (1984)		
DV	Storb "Immunoglobulin gene analysis in transgenic mice," in <u>Immunoglobulin Genes</u> , Academic Press Limited, pp. 303-326 (1989)		
DW	Storb et al. "Expression, allelic exclusion and somatic mutation of mouse immunoglobulin kappa genes," Immunological Reviews 89:85-102 (1986)		
DX	Szurek et al. "Complete nucleotide sequence of the murine γ 3 switch region and analysis of switch recombination in two γ 3 expressing hybridomas," J. Immunol. 135:620-626 (1985)		
DY	Tahara et al. "HLA antibody responses in HLA class I transgenic mice," Immunogenetics 32:351-360 (1990)		
DZ	Taki et al. "Targeted insertion of a variable region gene into the immunoglobulin heavy chain locus," Science 262:1268-1271 (1993)		
EA	Tanaka et al. "An antisense oligonucleotide complementary to a sequence in Ig2b Increase Ig2b germline transcripts, stimulates B cell DNA synthesis, and inhibits immunoglobulin secretion," The Journal of Experimental Medicine 175:597-607 (1992)		
EB	Taussig et al. "Regulation of immunoglobulin gene rearrangement and expression," Immunology Today 10:143-146 (1989)		
EC	Taylor et al. "Human immunoglobulin transgenes undergo rearrangement, somatic mutation and class switching in mice that lack endogenous IgM," International Immunology 6:579-591 (1994)		
ED	Thomas and Capecchi, "Site-directed mutagenesis by gene targeting in mouse embryo-derived stem cells," Cell 51:503-512 (1987)		

JUN 1

PATENT & TRADEMARK OFFICE

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Attorney Docket No.: 14643-009031US	Application No.: 09/724,965
		Applicant: Nils Lonberg et al.	
		Filing Date: November 28, 2000	Group: 1632
EE	Thomas et al., "High frequency targeting of genes to specific sites in the mammalian genome," Cell 44:419-428 (1986)		
EF	Tomlinson et al. "The repertoire of human germline V _H sequences reveals about fifty groups of V _H segments with different hypervariable loops," J. Mol. Biol. 227:776 (1992)		
EG	Uhlmann and Peyman "Antisense Oligonucleotides: A new therapeutic principle," Chemical Reviews 90:544-584 (1990)		
EH	Vlasov et al. "Arrest of immunoglobulin G mRNA translation in vitro with an alkylating antisense oligonucleotide derivative," Chemical Abstracts, page 28, 112:229433X (1990)		
EI	Weaver et al. "A transgenic immunoglobulin Mu gene prevents rearrangement of endogenous genes," Cell 42:117-127 (1985)		
EJ	Weiss "Mice making human-like antibodies," The Washington Post, April 28, 1994		
EK	Wofsy et al. "Reversal Of Advanced Murine Lupus In NZB/NZW F Mice By Treatment With Monoclonal Antibody To L3T4" J. Immunol. 138:3247-3253 (1987)		
EL	Yamamura et al. "Cell-type-specific and regulated expression of a human λ 1 heavy-chain immunoglobulin gene in transgenic mice," Proc. Natl. Acad. Sci. USA 83:2152-2156 (1986)		
EM	Yancopoulos and Alt "Developmentally controlled and tissue specific expression of unarranged V _H gene segments," Cell 40:271-281 (1985)		
EN	Yancopoulos and Alt "Regulation of the assembly and expression of variable-region genes," Ann. Rev. Immunol. 4:339-368 (1986)		
EO	Yasui et al. "Class switch from μ to δ is mediated by homologous recombination between δ_{μ} and ϵ_{μ} sequences in human immunoglobulin gene loci," Eur. J. Immunol. 19:1399-1403 (1989)		
EP	Zijlstra et al. "Germ-line transmission of a disrupted β_2 microglobulin gene produced by homologous recombination in embryonic stem cells," Nature 342:435-438 (1989)		
EQ	Zimmer and Gruss, "Production of chimeric mice containing embryonic stem (ES) cells carrying a homeobox Hox 1.1 allele mutated by homologous recombination," Nature 338:150-153 (1989)		
EXAMINER	DATE CONSIDERED		3/22/03

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.